In the Claims:

1. (Currently Amended)   A method for at least semi-automatically directly negotiating a relationship between at least a first user party and a second user party, the parties being at respective first and second computers connected over a network, the computers comprising ~~hardware~~ processors, the method <u>being carried out on said processors and</u> comprising the steps of:

(a)   providing a first intention for the first user party and a second intention for the second user party stored at memories of said respective ~~hardware~~ processors, each of said first intention and said second intention being stored within an intention data structure, the intentions respectively featuring a plurality of components;

(b)   over said network, exchanging at least one dispatch between the processor of the first user party and the processor of the second user party, said at least one dispatch including a reference to a value for at least one of said plurality of components;

(c)   electronically generating a merged portion, said merged portion also being within said intention data structure, said generating a merged portion being according to said reference to said value in said at least one dispatch, said electronically generating comprising within a respective data processor merging at least a portion of said first user intention and at least a portion of said second user intention, said portions comprising the said at least one of said respective components to which said value refers;

(d)   using said data structure, <u>electronically</u> altering at least one of said first intention for the first user party and said second intention for the second user party with said merged portion;

(e)   <u>electronically</u> comparing said first user intention to said second user intention; and

(f)   ~~if~~ <u>when</u> said first user intention matches said second user intention, <u>electronically</u> determining the relationship according to said merged portion.

2. (Original)   The method of claim 1, wherein said reference to said value is selected from the group consisting of a variable component, an actual value, a

request for a value from said second party, and a request to select a value from a set of values for said second party.

3. (Original)   The method of claim 1, wherein said reference to said value is determined by a compiled goal program which encodes constraints, preferences and negotiation parameters of said first or said second intentions.

4. (Previously Presented)   The method of claim 3, wherein said compiled goal program is used to create at least one procedure selected from the group consisting of

(i)   suggest a tuple of the form (v0,...,vn) of values;

(ii)   choose from a number of alternative tuples of values;

(iii)   rank tuples of values according to a desirability; and

(iv)   *suggest* an improvement to an input tuple of values;

5. (Original)   The method of claim 1, wherein said step of negotiating said relationship between said at least said first party and said second party is effected, at least in part, using a structure selected from the group consisting of one-to-one with or without revealing and one-to-many without revealing.

6. (Original)   The method of claim 3, wherein at least two goal programs are combined to form a combined goal program, which encodes said constraints, said preferences and said negotiation parameters of at least said first or said second intentions.

7. (Original)   The method of claim 2, wherein said variable component is associated with a predefined default interval.

8. (Original)   The method of claim 7, wherein said default interval is associated with at least one value, at least one range of values or a combination of at least one value and at least one range of values.

9. (Previously Presented)   The method of claim 1, wherein step (c) is performed by merging at least a portion of said first intention and at least a portion of

said second intention to form a merged portion, such that the relationship is defined according to said merged portion.

10. (Original) The method of claim 9, wherein only a portion of said first intention and only a portion of said second intention are merged to form the relationship.

11. (Original) The method of claim 9, wherein an entirety of said first intention and an entirety of said second intention are merged to form the relationship.

12. (Original) The method of claim 9, wherein said first intention and said second intention are incomplete, such that step (b) further comprises the steps of:

(i)   defining at least one computational device for adding at least one suggested component to at least one intention;

(ii)   executing said at least one computational device to obtain said suggested component; and

(iii)   sending a message from the first party to the second party, said message including a suggested component according to said at least one computational device.

13. (Previously Presented)   The method of claim 12, wherein said dispatch of step (b) also includes said first intention of said first party and is sent from said first party to said second party, such that said second party adds said suggested component to said merged portion.

14. (Original) The method of claim 13, wherein step (b) further comprises the step of:

(iv)determining by said second party whether to accept said suggested component.

15. (Original) The method of claim 13, wherein step (b) further comprises the step of:

(iv)   providing a value for said suggested component by said second party.

16. (Original) The method of claim 9, wherein said first intention and said second intention are incomplete, such that step (b) further comprises the steps of:

(i)   defining at least one computational device at the second party for adding at least one suggested component to at least one intention;

(ii)   executing said at least one computational device to obtain said suggested component; and

(iii)   sending a message from the second party to the first party, said message including a suggested component according to said at least one computational device.

17. (Original) The method of claim 9, wherein step (b) further comprises the step of:

(i)   providing a value for at least one component by said second party.

18. (Original) The method of claim 1, wherein said component also includes a constraint for restricting said value.

19. (Original) The method of claim 18, wherein said constraint determines that said value is not alterable.

20. (Original) The method of claim 18, wherein said constraint determines that said value is alterable, such that step (b) further comprises the step of sending a return message with a counter offer for altering said value of said at least one variable by at least one of the first party and the second party.

21. (Original) The method of claim 18, wherein step (c) further comprises the step of removing at least one constraint from at least one component.

22. (Currently Amended)   The method of claim 1, wherein step (d) further comprises the step of saving a state of each of said first intention and said second intention to form a previous state, before altering said first intention and said second intention, the method further comprising the step of:

(g)   ~~if~~when said first intention does not match said second intention, returning said first intention and said second intention to said previous state.

23. (Currently Amended)   The method of claim 1, the method further comprising the step of:

(g)   ~~if~~ when said first intention matches said second intention, notifying each party of acceptance of the relationship.

24. (Previously Presented)   The method of claim 1, wherein said first intention and said second intention are each constructed as a first intention tree and a second intention tree, respectively, such that step (e) is performed by comparing said first tree to said second tree.

25. (Original) The method of claim 24, wherein step (c) is performed by merging at least a portion of said first tree and at least a portion of said second tree to form a merged tree, such that the relationship is defined according to said merged tree.

26. (Original) The method of claim 25, wherein only a portion of said first tree and only a portion of said second tree are merged to form the relationship.

27. (Original) The method of claim 25, wherein an entirety of said first tree and an entirety of said second tree are merged to form the relationship.

28. (Original) The method of claim 1, wherein each component is constructed from a set of shared classes for the first party and the second party.

29. (Previously Presented)   The method of claim 1, wherein the relationship is determined as a contract, said contract featuring a plurality of intentions, such that steps (a)-(f) are performed for each of said plurality of intentions.

30. (Currently Amended)   A system comprising a plurality of computers connected over a network, for at least semi-automatically directly negotiating a relationship between a plurality of user parties in respect of components taking a value, ~~the computers and the network comprising hardware~~, the system comprising:

(a)   <u>said computers connected over said network respectively including</u> a plurality of user party modules, each comprising programs and data at <u>said</u> respective ones of said plurality of computers, the modules including at least a first user party module and a second user party module, data at each user party module featuring a respective user intention configured within and according to an intention data structure, the respective user intentions being for determining the relationship, said user intentions respectively featuring a plurality of components in common to be determined for the relationship and respective values, such that a process of negotiation by at least one of said first and second user party modules through said intention data structure matches said user intention of said first user party module to said user intention of said second user party module to provide a value agreed between users for said plurality of components; and

(b)   a central server connected to said plurality of computers over said network, the central server being a computer ~~comprising hardware~~, the central server being configured for at least initially connecting at least said first user party module to at least said second user party module for performing said direct negotiations to reach said agreed value, said negotiating comprising generating within said system a common user intention according to said intention data structure by merging of said respective user party intentions.

31. (Original) The system of claim 30, wherein at least said first party module features a plurality of intentions for negotiating with a plurality of parties.

32. (Original) The system of claim 31, wherein said central server further comprises a server party module for performing said negotiations on behalf of at least one party.

33. (Original) The system of claim 32, wherein only said server party module performs said negotiations on behalf of a plurality of parties.

34. (Original) The system of claim 31, wherein said central server further comprises a server party module for performing said negotiations on behalf of said central server as a broker.

35. (Original) The system of claim 31, wherein said party modules perform said negotiations and said central server only initially connects said first party module to said second party module.

36. (Original) The system of claim 31, wherein at least one party module features at least one computational device for generating a suggested alteration to said intention according to at least one rule, such that if said first intention does not match said second intention, said suggested alteration is generated by said at least one computational device.

37. (Original) The system of claim 36, wherein at least one party module further features at least one computational device for determining if said suggested alteration is accepted.

38. (Currently Amended) A method for at least semi-automatically directly negotiating a relationship between at least a first user party and a second user party, said user parties being at respective computational devices ~~comprising hardware and~~ connected over a network, ~~the network comprising hardware,~~ the relationship relating to components, the method being performed by a data processor, the method comprising:

(a) electronically generating a first intention for the first user party at a first computation device and a second intention for the second user party at a second computational device, each of said first intention and said second intention featuring a plurality of components and being in accordance with an intention data structure;

(b) electronically comparing said first intention to said second intention;

(c) ~~if~~ when said first intention is different than said second intention, electronically providing for one of said computational devices to define an additional component for the intention of at least the first user party;

(d) electronically sending at least one message from the first party computational device to the second party computational ~~hardware~~ device over said network, said at least one message including said additional component;

(e) electronically determining ~~if~~ when said additional component is accepted by the second party;

(f) ~~if~~ when said additional component is accepted by the second party, then within said respective computational ~~hardware~~ devices electronically adding said additional component to said first intention for the first party and to said second intention for the second party to provide respective intentions that comprise said additional component;

(g) repeating step (c) at least once; and

(h) ~~if~~ when said first intention matches said second intention, then electronically merging the respective first and second intentions to form a common user intention, and determining the relationship according to said common user intention, said common user intention also being in accordance with said intention data structure.

39. (Previously Presented) The method of claim 38, wherein steps (c) to (h) are repeated at least once.

40. (Currently Amended) For use in a system for at least semi-automatically directly negotiating a relationship between a first user party and a second user party, each of the first user party and the second user party having a first user intention and a second user intention, respectively such that the relationship is negotiated by matching the first user intention and the second user intention, a device operated by at least one of the first user party and the second user party, the device comprising a memory, a processor, a first party user inteface and a second party user interface, said memory, said processor~~, said first party user interface and said second party user interfaces being deployed within hardware components~~:

(a) said memory comprising an intention data structure ~~within said memory hardware component~~, said intention data structure being configured for holding said intentions such that the respective user intentions are held within and in accordance with said intention data structure~~,~~;

(b) said processor comprising a negotiation control program ~~operable on said processor hardware component~~ and configured for controlling a process of negotiation between said users via said respective user interfaces ~~deployed within hardware components~~; and

(c) said processor comprising a unifier, associated with said negotiation control program ~~on said processor hardware component~~, configured to unify said user intentions via said intention data structure of said memory ~~hardware~~ component, said

unifier being implemented within said processor ~~hardware component~~, via said process of negotiation between users, said negotiation being via said user interface ~~deployed within hardware components~~ to form a merged user intention, said merged user intention also being within said data structure, said merged user intention unifying said respective first and second intentions, therefrom to define the relationship in accordance with said data structure.

41. (Currently Amended)   The device of claim 40, wherein said intention data structure includes at least one constraint, the ~~device~~ processor further comprising:

(d)   a constraint solver for solving said at least one constraint.

42. (Currently Amended)   A method of creating a minimizing goal for a level within a goal program comprising a hierarchy of levels, for at least semi-automatically directly negotiating a relationship between at least a first user party and a second user party, the parties being at respective first and second electronic computers connected over a network, ~~said computers and said network comprising hardware,~~ the method comprising the steps of:

(a)   providing electronically in a manner accessible to said parties at said electronic computers ~~comprising hardware~~ over said network ~~comprising hardware~~ a goal program having a plurality of levels in a hierarchy, at least some of said levels including constraints;

(b)   electronically identifying constraints within a respective level at said electronic computers ~~comprising hardware~~;

(c)   electronically normalizing each of said identified constraints respectively to render said identified constraints mutually comparable, so as to obtain normalized constraints at said electronic computers ~~comprising hardware~~; and

(d)   electronically combining said normalized and thus mutually comparable constraints to create said minimized goal for said level at said electronic computers ~~comprising hardware~~, thereby to provide a level within said hierarchy having a minimized goal and thus providing levelwise solution of said goal program.